

TABLE I. Categories and ICD9 Codes of Birth Defects and Genetic Diseases Included in This Study*

Conditions	ICD9
Central nervous system/eye defects	740.0 - 743.9
Cardiovascular system defects	745.0 - 747.9
Cleft palate and cleft lip	749.0 - 749.9
Gastrointestinal defects	750.0 - 751.9
Genitourinary defects	752.0 - 753.9, 654.0
Musculoskeletal & limb defects	754.0 - 755.9
Miscellaneous structural defects	228.0 - 228.1, 520.0, 520.5, 524.0, 744.0 - 744.9, 748.0 - 748.9, 745.6 - 745.7, 759.0 - 759.4, 759.7 - 759.9
Chromosomal anomalies	758.0 - 758.9
Hereditary neurocutaneous disorders	237.7, 759.5-759.6
Hereditary metabolic disorders	243.0, 255.2, 257.8, 270.0-270.8, 271.0-271.8, 272.7, 275.0-275.1 277.1-277.2, 277.4-277.6
Cystic fibrosis	277.0
Hereditary immunodeficiencies	279.2, 279.8, 288.1, 288.2
Non-sickling hereditary blood disorders	282.0-282.3, 282.7-282.8, 284.0, 286.0-286.4, 773.0, 774.0
Sickle cell disease & thalassemias	282.6, 282.4
Hereditary neurologic or storage disorders	330.0-330.1, 333.4, 334.0-334.1, 335.0, 345.6, 356.0-356.3, 359.0-359.3

*From MCMFs of NCHS.

Fig. 1. Age-adjusted mortality rates for deaths associated with birth defects, by sex and race, per 100,000 population, United States, 1979-1992

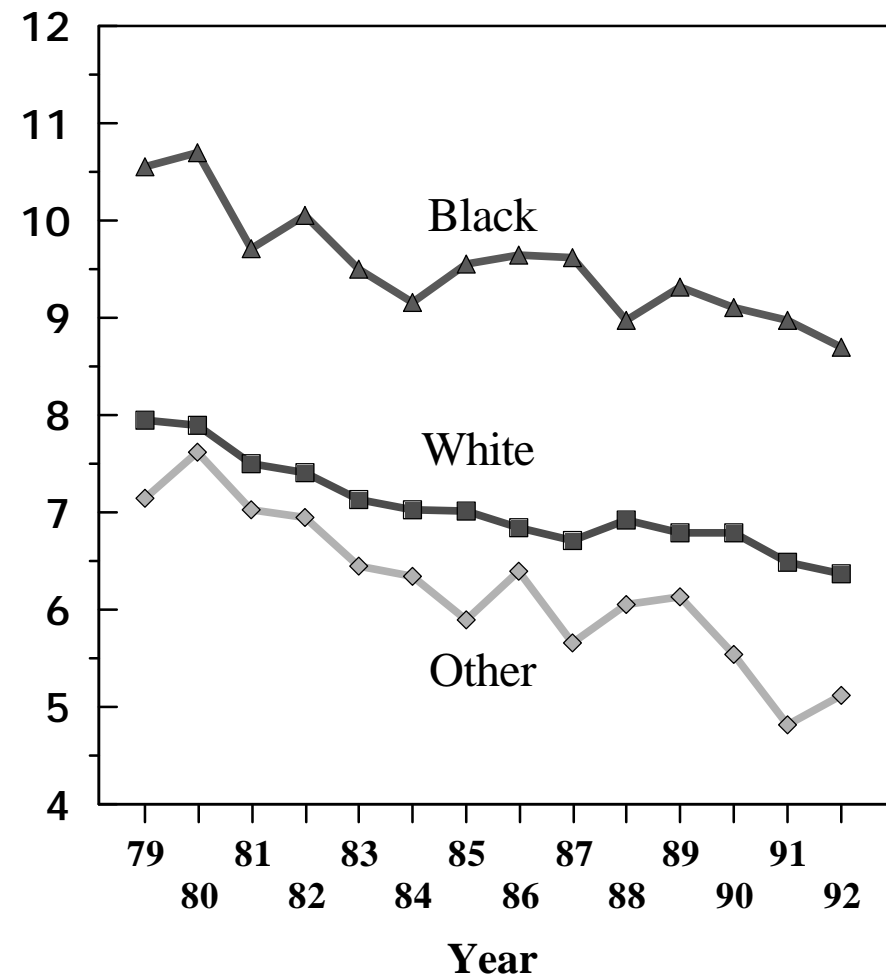
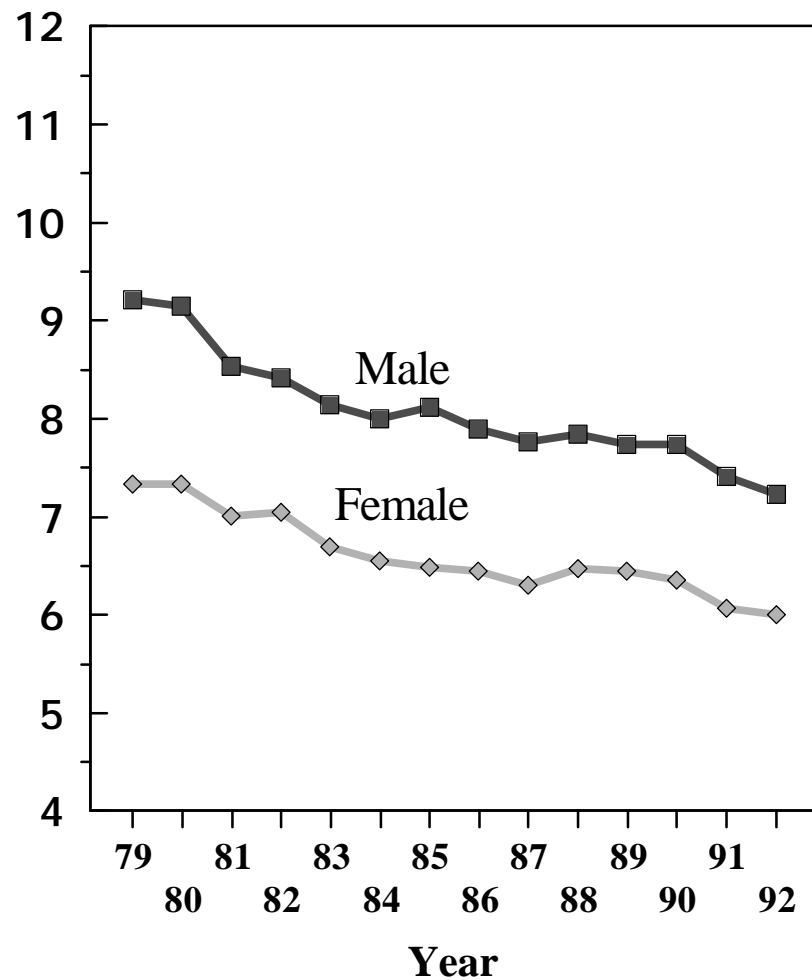


Fig. 2. Age-adjusted mortality rates for deaths associated with genetic diseases, by sex and race, per 100,000 population, United States, 1979-1992

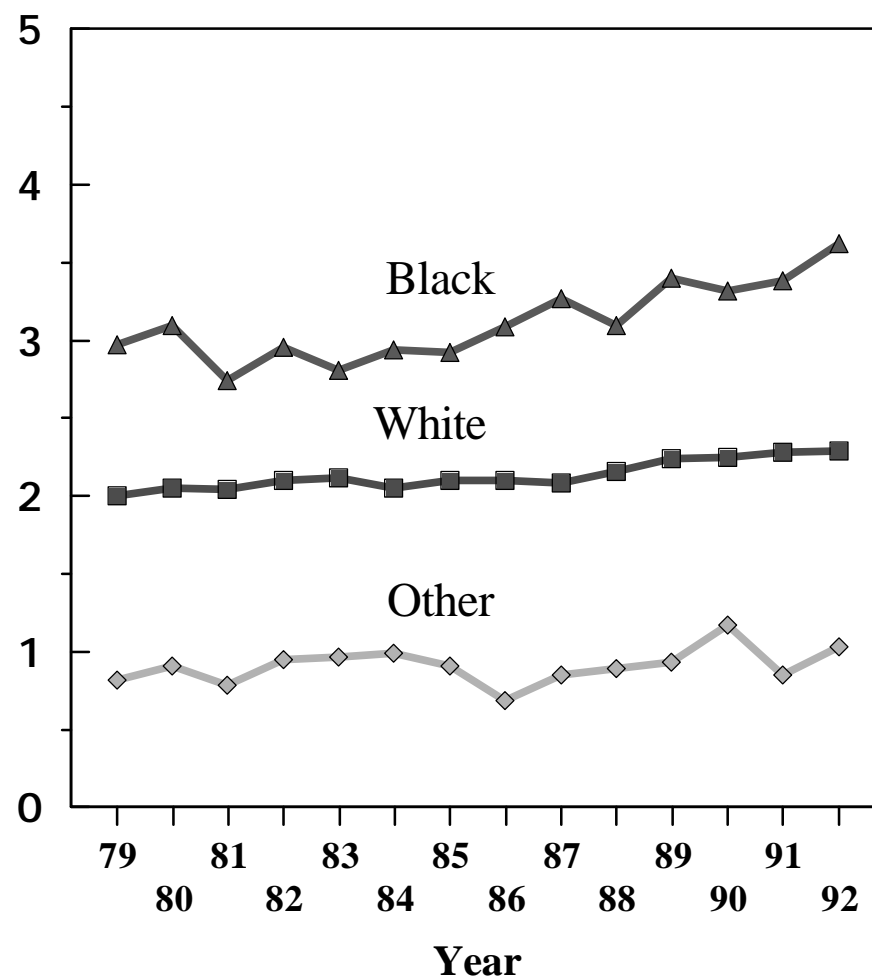
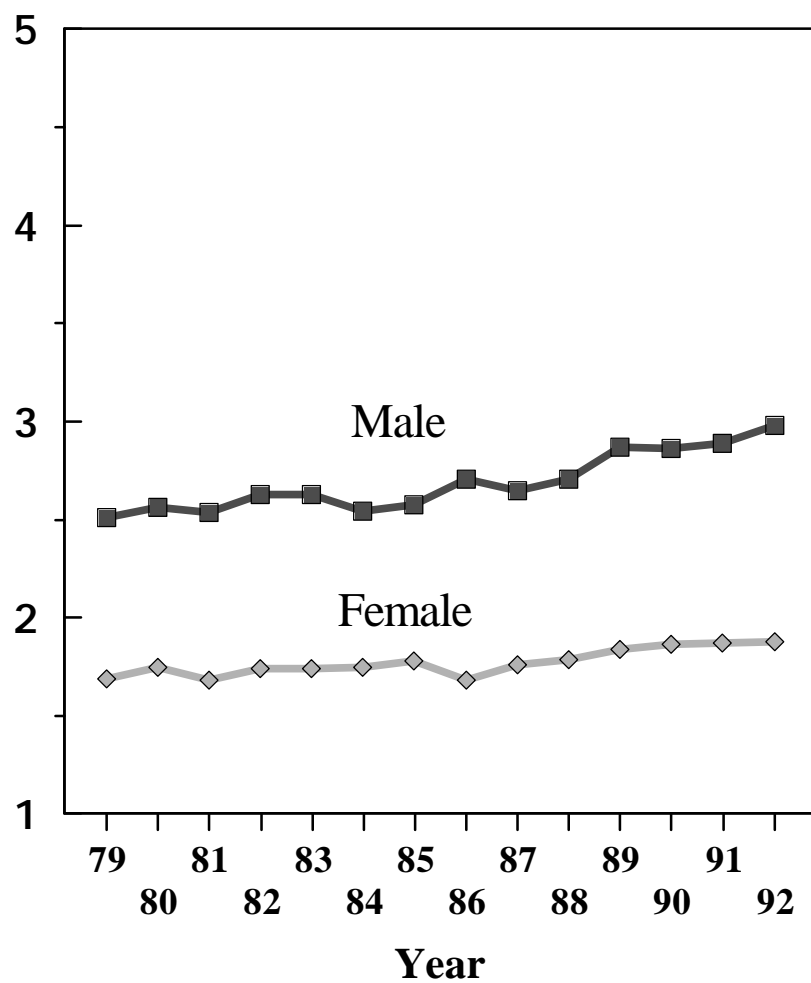


Fig. 3. Age-specific mortality rates for deaths associated with birth defects, by sex and race, United States, 1979-1992

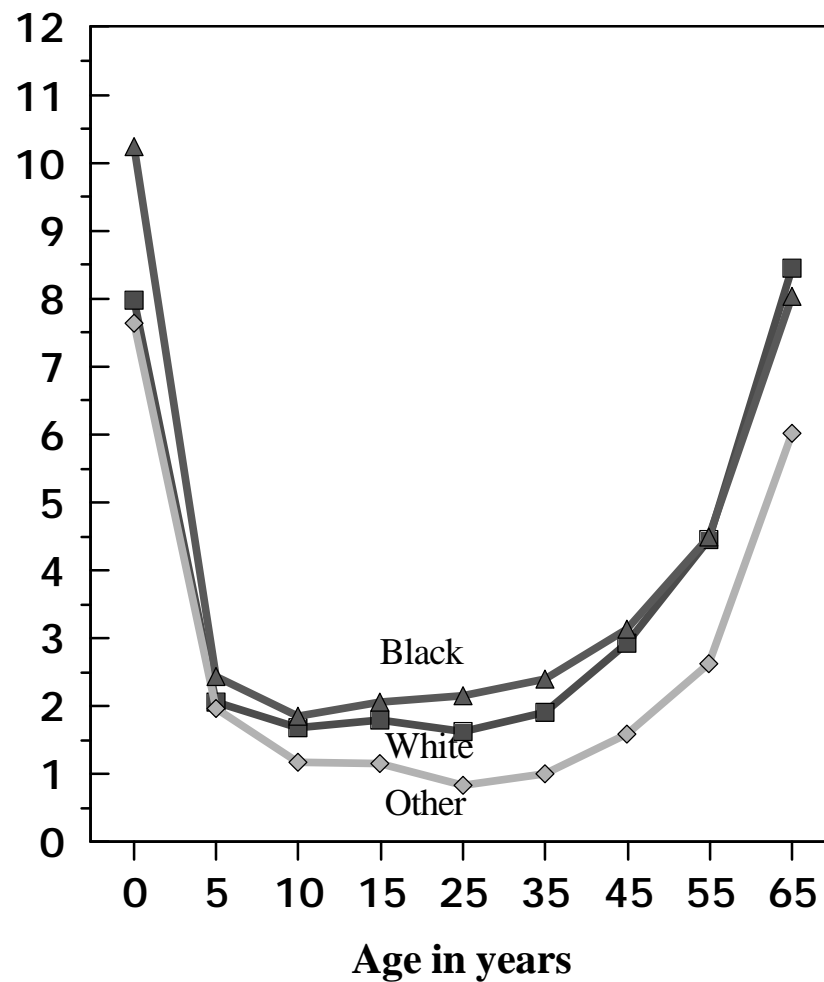
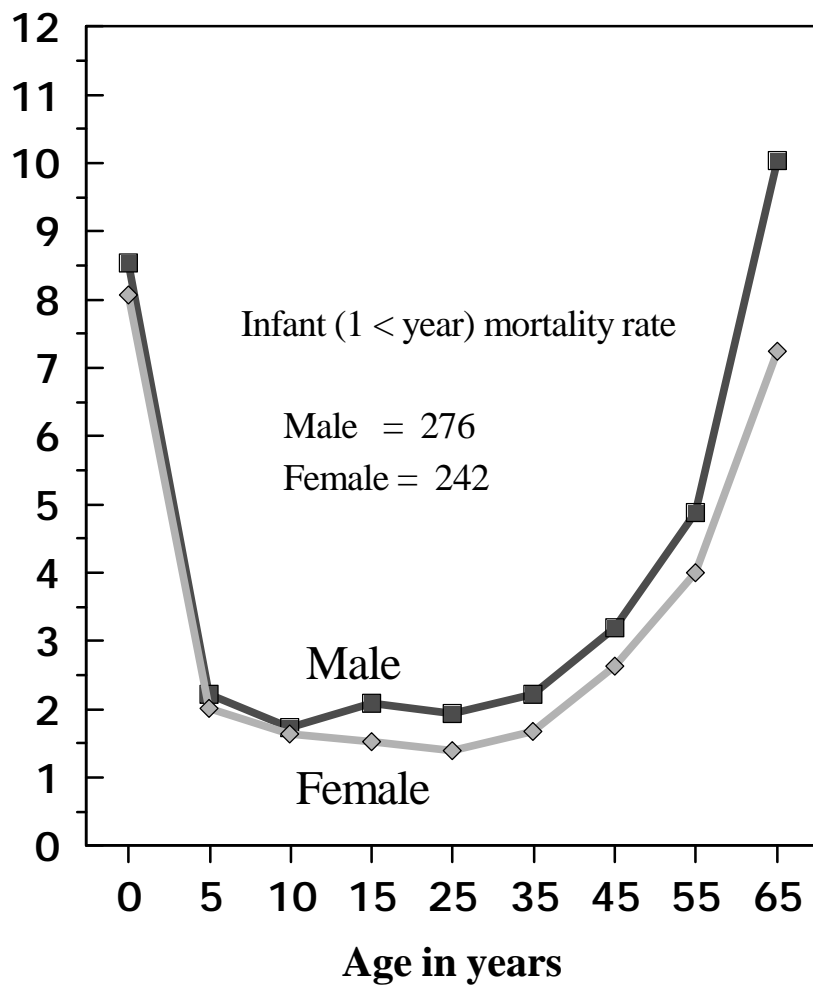


Fig. 4. Age-specific mortality rates for deaths associated with genetic diseases, by sex and race, United States, 1979-1992

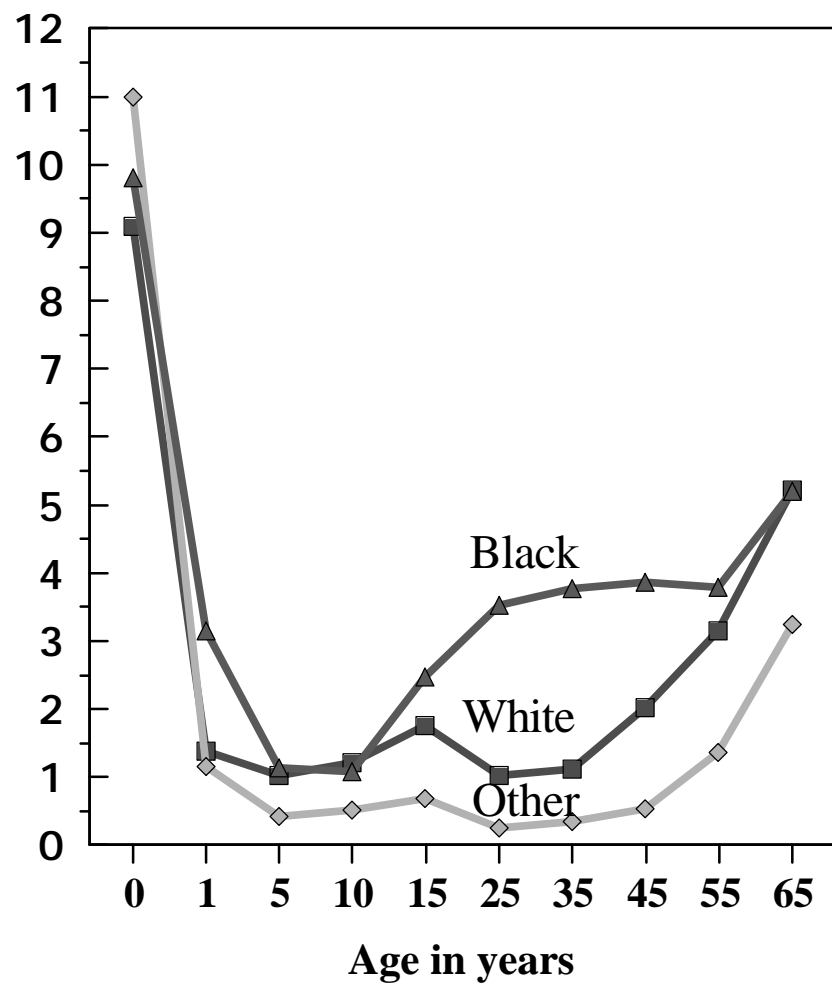
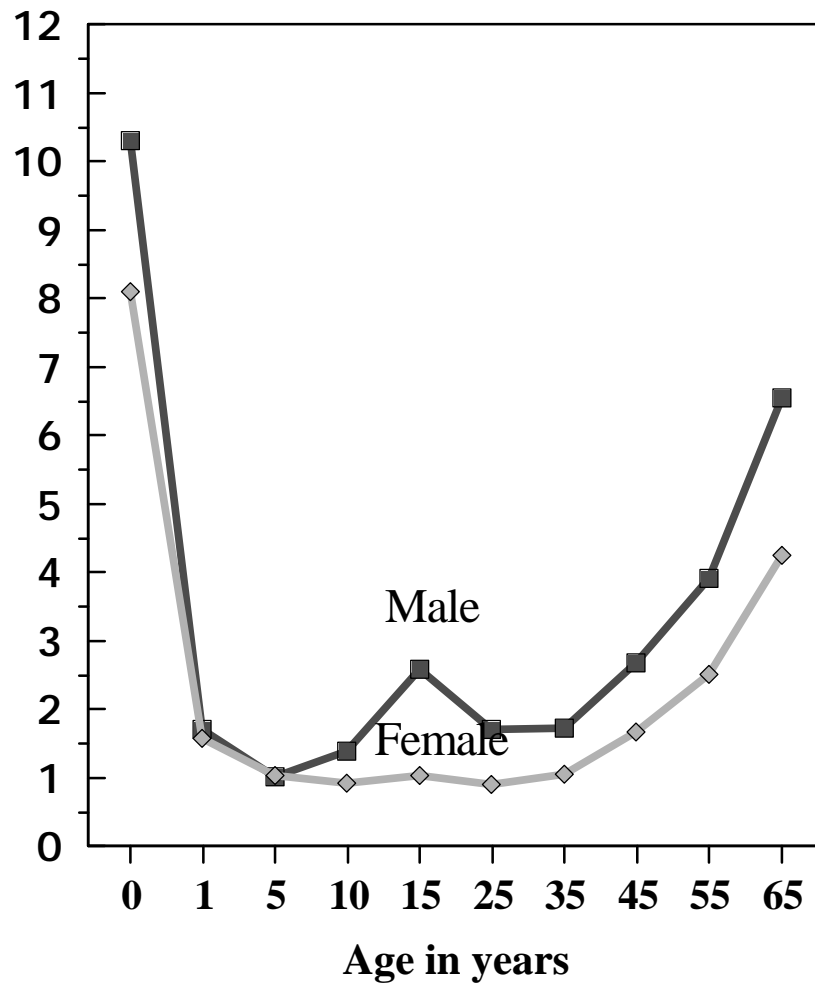


Fig. 5. Proportion of deaths that were associated with birth defects and genetic diseases, by sex and race, United States, 1979-1992

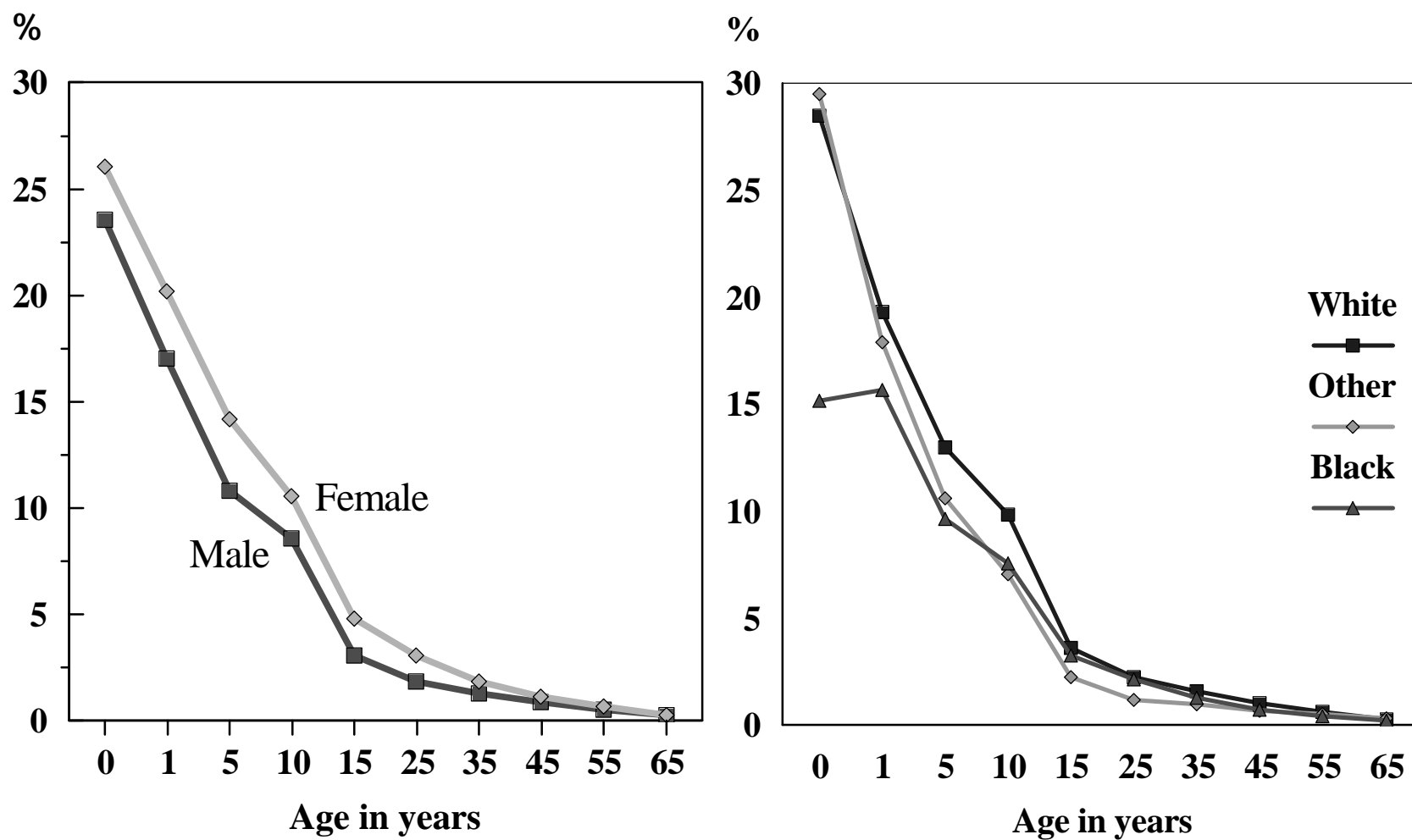


TABLE II. Percentage Distribution of Deaths Associated With Selected Birth Defects and Genetic Diseases by Age Group, United States, 1979-1992*

	Age group (years)										Total %
	Under 1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	
Birth defects											
Central nervous system	16.7	20.7	26.7	22.4	15.0	10.8	8.0	5.9	5.7	11.5	14.9
Cardiovascular system	44.7	55.4	50.1	56.7	59.0	56.7	55.6	43.5	38.0	36.5	45.6
Cleft palate and cleft lip	0.9	0.7	0.4	0.2	0.1	0.1	0.0	0.1	0.1	0.3	0.6
Gastrointestinal defetcs	3.8	5.7	3.4	1.8	1.3	1.4	1.6	2.6	3.2	8.5	4.2
Genitourinary	8.9	1.4	1.4	1.3	1.9	3.6	8.0	16.0	20.4	22.6	10.3
Musculoskeletal system	1.4	0.8	0.7	1.1	1.1	0.8	0.7	0.6	0.8	1.7	1.2
Miscell. structural defects	33.0	15.3	14.4	12.8	15.5	16.1	14.6	12.4	12.4	16.7	24.9
Chromosomal system	11.8	12.8	10.9	10.8	13.4	15.5	15.1	21.0	21.0	3.2	11.8
Birth defects total % ^a	55.3	6.6	2.1	1.7	4.1	3.9	3.5	3.9	5.4	13.6	100.0
Birth defects as % of total deaths	23.9	15.5	8.3	5.6	1.8	1.2	0.9	0.6	0.3	0.2	0.9
Genetic diseases											
Hered. neurocutaneous disorders	1.5	2.3	2.8	3.5	4.2	8.3	7.7	6.4	6.9	6.9	5.9
Hered. metabolic disorders	26.2	25.2	20.6	16.2	8.1	8.2	15.2	21.2	24.9	28.8	20.5
Cystic fibrosis	8.6	10.0	35.4	34.0	23.8	17.8	5.8	1.1	0.5	0.7	9.3
Hered. immunodeficiencies	3.4	4.3	2.1	0.8	0.6	2.1	2.6	1.5	1.7	2.6	2.1
Non-sickling hered. blood disorders	11.3	3.7	4.9	6.2	4.8	9.1	11.5	10.4	9.5	15.7	10.4
Sickle cell & thalassemias	4.4	19.2	9.0	7.1	13.5	28.0	24.1	12.5	6.2	6.4	12.1
Hered. neurologic or storage disorders	44.9	35.7	25.4	32.8	45.6	27.4	33.8	46.3	48.2	33.7	38.3
Miscellaneous hereditary disorders	0.2	0.2	0.2	0.1	0.1	0.3	0.5	1.2	2.6	5.5	2.1
Genetic diseases total % ^a	6.5	4.4	3.3	3.9	13.6	10.1	8.5	9.6	12.9	27.9	100.0
Genetic diseases as % of total deaths	0.9	3.1	4.0	3.9	1.8	1.0	0.6	0.4	0.2	0.1	0.3
Birth defects and genetic diseases total %^a											
Birth defects and genetic diseases as % of total deaths	24.6	18.4	12.2	9.3	3.5	2.2	1.5	1.0	0.6	0.3	1.1
Total birth defests and genetic diseases deaths	141,211	19,487	7,464	6,911	19,878	16,761	14,853	16,595	22,874	54,174	320,208
Total deaths	572865	105,944	61,246	73,956	564,565	765,303	988,626	1,709,911	3,850,655	20,393,910	29,086,981

*From MCMFs of NCHS.

^a Although the total percentage distribution of birth defect and genetic disease adds up to 100% according to total number of cases, the column percentage doesn't necessarily add up to 100% because of some cases of multiple birth defects and genetic diseases. For example the percentage distribution of infant deaths associated with birth defects is about 121% indicating that a considerable percent of infants had multiple birth defects and/or genetic diseases.